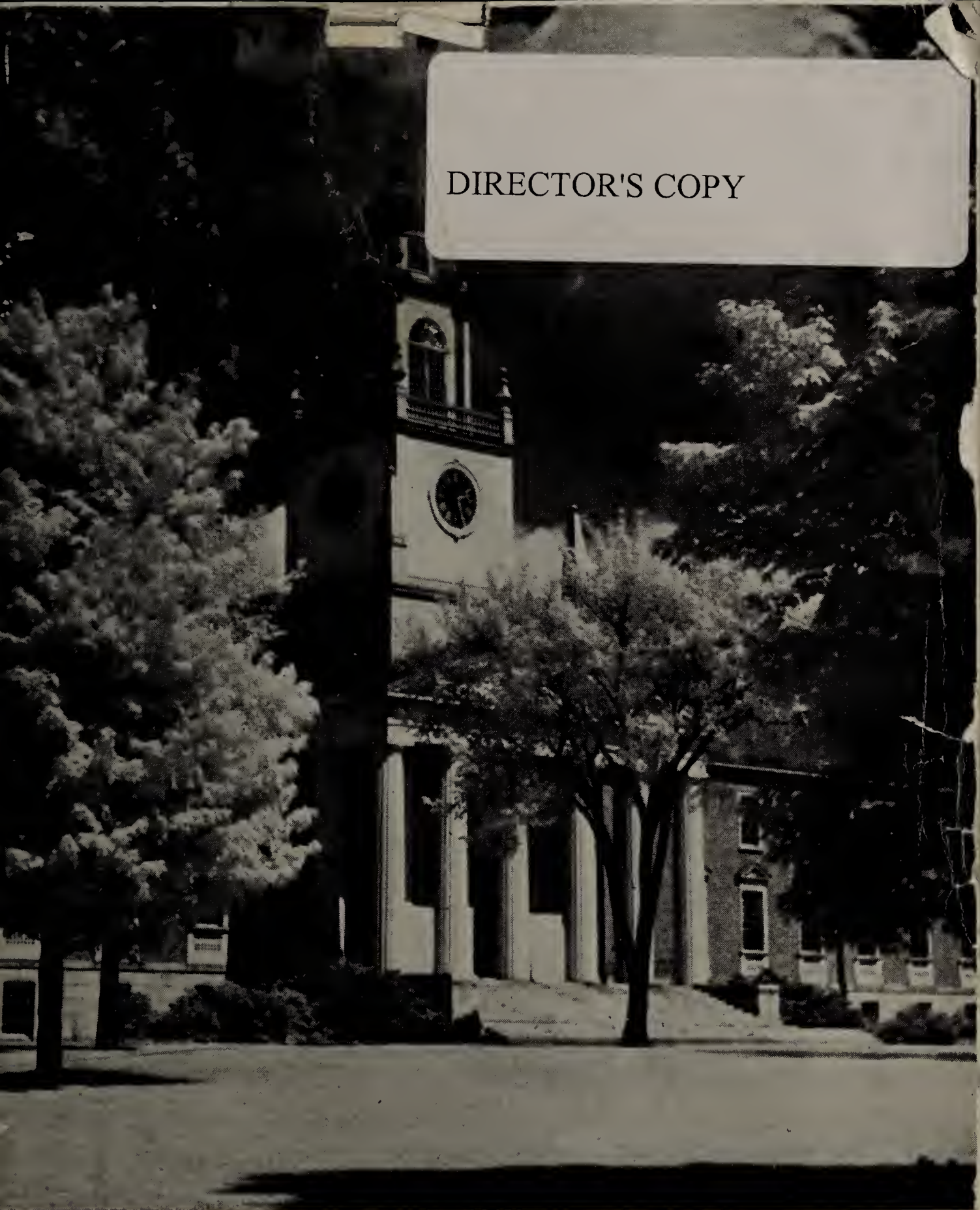


DIRECTOR'S COPY



The Andover Summer Session

June 28—August 23, 1944

PHILLIPS ACADEMY, ANDOVER, MASSACHUSETTS

**The
Andover Summer Session
1944**



**Phillips Academy
Andover • Massachusetts**

PHILLIPS ACADEMY

Phillips Academy, usually called Andover, is a college-preparatory school for boys with an enrollment of about 700. Now in its 166th year, it is a liberal, modern school with a long tradition of national service and devotion to democratic ideals. Stressing self-reliance, it has always sought to develop sound scholarship and manly character. Scholarship funds put the education which Andover offers within reach of any serious and able student in need of aid.

THE ANDOVER SUMMER SESSION

Instituted in 1942 primarily as a war-time measure, the Summer Session enables boys from high schools throughout the country to finish their secondary education before being called to military service and to get training which will prepare them more rapidly and thoroughly for national service. It offers to younger boys the stimulating experience of school life away from home and the challenge of rigorous standards. Last summer 260 boys attended, representing 112 different schools and 27 states,

The Summer Session Curriculum includes most of the basic courses given by Andover in its regular academic year, with emphasis upon subjects considered most valuable for pre-military training. Courses are offered, at various levels, in mathematics, sciences, foreign languages, English,

art, history, current affairs, mechanical drawing, navigation, aeronautics. Successful completion of a major course in the Summer Session secures one unit of credit towards a diploma.

Daily Assemblies, making use of educational films, lectures, and open forums, deal with the origins and nature of the war, America's relationships with her allies, and problems of post-war reconstruction.

A Work Program, including a school garden, gives students valuable practical experience and helps to relieve national food and labor shortages. Students ordinarily give one afternoon a week to such work. For qualified boys, regular jobs are open on neighboring farms at prevailing rates of pay.

A Comprehensive Health and Athletic Program keeps boys in good physical condition. Students daily participate in body-conditioning exercises and have a choice of organized summer sports. Swimming is available either in the gymnasium pool or in an attractive small lake just off the campus. Each student is given a thorough medical examination, and the Infirmary is open and staffed throughout the summer.

All the Facilities of Phillips Academy are available during the summer. The Summer Session faculty of about 40 men is drawn almost entirely from the regular Andover teaching staff.

The Charge for each student at the Summer Session is \$300, which covers tuition, room, and board.

Ten Full Scholarships and a few partial scholarships will be awarded on a competitive basis to boys of unusual promise not previously enrolled in Phillips Academy. It is hoped that no able student of serious purpose will be prevented for financial reasons from enrolling.

PLEASE SEND ME

- ☐ An illustrated catalog of the 1944 Summer Session containing course descriptions and full details.
- ☐ A scholarship application blank

Please Print

Name.....

Address.....

Street

.....

City

State

Foreword



The Andover Summer Session, which opens for its third season on June 28, 1944, is no longer an experiment but a manifest success. Planned originally as a means of putting the school equipment and resources to good use during the existing emergency, it now offers courses highly beneficial to young men presumably with war service ahead of them. With its emphasis on physical fitness under ideal conditions, its broad curriculum, and its maintenance of high intellectual standards, it has gained public recognition and confidence as an important part of the contribution made by Phillips Academy to the national war effort. The Summer Session of 1944 presents a program designed particularly for boys whose induction is imminent; but it also offers younger students important educational opportunities during the summer months. It is maintained and carried on under the authority and with the full backing of the Trustees of Phillips Academy, who believe that it supplements admirably the regular three-term program of the school.

Claude M. Fress

Headmaster of Phillips Academy



THE MEMORIAL TOWER

In memory of eighty-seven Andover men who gave their lives in World War I

Phillips Academy

Phillips Academy in Andover, Massachusetts, is a college-preparatory, boarding school for boys. Andover, as the Academy is often called, was founded in 1778, with one master and thirteen pupils. Today it has an enrollment of seven hundred and a faculty of seventy-two. Its students, ranging in age from thirteen to eighteen, come from thirty-seven states and fourteen foreign countries.

Phillips Academy is a liberal, modern school with a long tradition of national service and devotion to democratic ideals. It has always sought to develop in its students sound scholarship and manly character, emphasizing resourcefulness, self-reliance, and independence. Scholarship funds put the education which it offers within reach of any serious and able student in need of aid.

Throughout the four years of its curriculum, Andover stresses thorough training in English, mathematics, science, history, and foreign languages, while offering a wide variety of other liberal arts studies and, in this emergency, many courses of immediate value as pre-military training.

The town of Andover, in historic Essex county, is twenty-five miles north of Boston, from which it is easily reached by train and bus. The excellent Andover Inn is on the Academy grounds.

The Andover Summer Session

Instituted in 1942 primarily as a war-time measure, the Summer Session enables boys from Phillips Academy and other schools to finish their secondary school education before being called to military service and to get training

which will prepare them more rapidly and thoroughly for national service, both in this war emergency and beyond.

The Summer Session has other important functions. It offers many younger boys the stimulating experience of boarding school life away from home, the opportunity of making friends with boys from diverse localities and backgrounds, and the challenge of rigorous preparatory school standards. It gives boys who are planning to enter Andover in the fall an opportunity to strengthen their academic preparation and to adjust themselves to Andover standards and life. It also assists students who are short of normal class standing to make up their deficiencies.

Up to the limit of its summer capacity, the Andover Summer Session welcomes, in addition to Phillips Academy students, **qualified boys from high schools and preparatory schools throughout the country.** Last summer two hundred and sixty boys attended, representing one hundred and twelve different schools and twenty-seven states. Of this number of students, one hundred and sixteen were Phillips Academy boys; fifty prepared themselves in the Summer Session to enter Andover in the fall; and ninety-four came only for the summer.

The comprehensive curriculum of the Summer Session meets the varying needs of boys of different ages. Further, for all of its students the Session provides a well-rounded educational experience outside the classroom. All students take part in daily assemblies planned to increase understanding of international problems, the progress of the war, and post-war reconstruction. They give a portion of their time,—approximately one afternoon a week,—to work projects on the Academy grounds, in a school garden, or on neighboring farms. In addition to daily sports, they participate in a rigorous program of body-conditioning exercises.

WAR PROGRAM FOR ANDOVER SENIORS

Phillips Academy Seniors who become liable to induction under the Selective Service Act before February, 1945, and who therefore cannot expect to be permitted to remain in school until their graduation in June, may begin their Senior year in the Summer Session. After three terms of the normal Andover senior program, they will be graduated at the end of the winter term, late in February, 1945. If called to service before then, they may, under certain conditions, be awarded diplomas, *honoris causa*. This program is open to qualified boys who have not previously attended Phillips Academy.

Questions regarding terms of admission, scholarships, programs of study, and diploma requirements for new Seniors enrolling under this War Program should be addressed to the Director of Admissions, Phillips Academy, Andover, Massachusetts.

THE SUMMER SESSION CURRICULUM

The following is a general statement of the content and organization of the program of studies open to all Summer Session students who are not enrolled in the War Program for Seniors outlined above. The Summer Session curriculum includes most of the courses given in the regular academic year at Andover, with emphasis upon subjects considered valuable as pre-military training. A brief description of the courses offered is printed at the end of this catalogue. *No course will be given unless it has a sufficient enrollment.* The time-schedule of the recitations may, in some instances, restrict the free choice of courses. Applicants for admission are expected to make known the courses which they wish to take, and will be informed of any conflicts of hours as soon as the schedule is fixed.

Major Courses

Major courses normally meet **two hours** a day, six days a week, usually during the first and last hours of the morning. A major course is substantially the equivalent of a similar full course taken during the regular academic year at Phillips Academy. An Andover student who completes a major course in the Summer Session receives one unit of credit for it towards his diploma. Other secondary schools have been willing to give similar credit for such a course, but in each case individual arrangements need to be made by the student with the school in question.

Minor Courses

Minor courses meet **one hour** a day, six days a week. They are of three main kinds.

The first consists of pre-military training courses, such as those in advanced mathematics and phases of physics (when not taken as majors), in navigation, aeronautics, and mechanical drawing.

The second, designed to broaden general understanding, includes courses in literature, art, history, and other social studies, with emphasis upon the present day. Under certain conditions, the above courses may receive one-half unit of credit towards an Andover diploma.

The third type of minor course is the review course, the purpose of which is to help a student make up a course failed during the regular school year or increase his ability to handle a subject in which he is weak. Such a course is particularly helpful to a boy who, planning to enter Phillips Academy in the fall, needs further grounding in the materials he will study the following year. Completion of a minor review course secures credit for that course at Phillips Academy without further examination.

Activities Courses

Activities courses, of five hours a week or less and normally requiring little or no outside preparation, are also an integral part of the Summer Session program.

Those in communications (receiving and sending the Morse code), first aid, typewriting, coastal piloting, and spoken foreign languages give practical training in skills which may prove useful in military service. Others of a cultural nature will be organized in dramatics, for the purpose of producing a few one-act plays before the student body; in studio art, using the resources of the Addison Gallery; in music, for practice in individual or ensemble playing; and in reading.

Activities courses do not count for credit at Andover.

The Normal Schedule

Each boy's program is carefully planned by his faculty adviser.

Depending upon his special needs and abilities, a student normally takes *either*

(1) Twelve hours a week of regular academic work (one major course **or** two minor courses) *plus* five hours a week of afternoon activities courses

or

(2) Eighteen hours a week of regular academic work (usually one major **and** one minor course) and *no* activities course.

No student is permitted to take two major courses.



THE COCHRAN CHAPEL

GENERAL FEATURES OF THE SUMMER SESSION

Daily Assemblies

The daily assemblies of the Summer Session deal with the origins and nature of the war, the political and geographical aspects of global warfare, America's relationships with her allies, and post-war reconstruction. Extensive use is made of educational and documentary films, supplemented by talks and open forums, during which questions may be asked and opinions exchanged.

Religious Services

A simple religious service is held on Sundays in the late afternoon. Students are required to attend either this service or a service in one of the town churches. The Academy minister will be a member of the Summer Session faculty and available for consultation with students.

Work Program

Each Summer Session student is required to share in the physical labor of the community. Such work on the school's garden, grounds, and buildings not only gives students valuable practical experience but also enables them to make a direct contribution towards relieving national food and labor shortages. Each boy, in company with faculty members who have offered their services, will give one afternoon a week to such work, and will stand ready to help out at other times if an emergency arises. Those who wish to spend more time in farming and other essential tasks for which manpower is scarce may apply for steady jobs at the school or on neighboring farms. Boys accepted for these steady jobs will be excused from other afternoon activity and athletic programs and will receive compensation at

the prevailing rates. No boy who is carrying more than twelve hours of regular academic work will be accepted for such steady jobs.

Physical Fitness and Sports

The Summer Session has a comprehensive health and athletic program. On five days a week each student, unless he is excused for the work program, takes part in body-conditioning exercises given under the supervision of the Department of Health. Designed to develop muscular coordination, good posture, strength, and physiological efficiency, these exercises have proved extremely effective in both the winter and summer sessions of Phillips Academy.

Organized sports follow the body-conditioning exercises. Tennis, swimming, baseball, soft ball, volley ball, outdoor basketball, and informal track athletics are offered, with frequent intramural contests and tournaments. The numerous Academy playing fields, baseball diamonds, and tennis courts provide excellent facilities. On rainy days the Case Memorial Cage and the Borden Gymnasium are used.

At the start of the Session a swimming test is given to each boy, and those who cannot swim are required to take lessons in the Academy pool. Swimming instruction is also given to others who wish it. Emphasis is put upon a water-safety program following the recommendations of the American Red Cross and the military services.

The Bobby Thompson Pond

The Bobby Thompson Pond is an attractive small lake in the Moncrieff Cochran sanctuary, ninety acres of woodland adjoining the Academy campus. In hours permitted for student swimming, a Life Guard will be in attendance.

Health Supervision and Medical Care

In addition to directing the physical fitness program described above, the Academy Department of Health supervises the Summer Session diet, the health of food handlers, the condition of the swimming pool and pond, and other aspects of community hygiene. Each student is given a thorough medical examination at the beginning of the Summer Session, and a report of any conditions requiring attention is sent to his parents. Students are urged to seek the help of the school physician in any matter pertaining to their mental or physical health.

The Isham Infirmary, a well-equipped small hospital, is open throughout the Summer Session, with a trained nurse in attendance and the school physician available. In an emergency, hospitals and specialists of the city of Boston can be reached within an hour. There is no charge for care at the Isham Infirmary in the event of minor injuries or illnesses of short duration. Extra charges are made if the services of private nurses or consultants prove necessary, or in the event of injuries or illnesses involving considerable medical attention and more than three days' stay at the Infirmary. In order to assist parents in budgeting such expense for extra medical care, blanket accident and health insurance is offered to Summer Session boarding students at a charge of \$5.00 for the entire eight weeks. This will be included on the Summer Session tuition bill unless advance notice is given that it is not desired.

Discipline and Individual Responsibility

Attendance at the Andover Summer Session implies a serious purpose on the part of the student and a willingness to assume a large measure of responsibility for maintaining order and for cooperating directly in the running of the Session. Rules are few and simple, and are based on the



Self-Service at the Summer Session Cafeteria



Bartlet Hall, a Summer Session Dormitory

assumption that the student is willing and able to discipline himself.

Dormitories have faculty supervision. The students themselves perform some of the everyday tasks connected with the operation of the school. They make their own beds, keep their own rooms in order, serve themselves at meals, and take their turn at the regular work of the dining hall. Every student is required to meet all his appointments.

With the exception of the first and last weekends of the Session, students in good standing may go to their homes or visit their friends' homes on weekends, leaving after their last appointment on Saturday morning and returning in time for evening study hours Sunday evening. Similar privileges are allowed for Saturday and Sunday day trips to nearby places.

Any student who shows himself unwilling to conform to the spirit of the Session, who neglects his work, or who is believed to exercise an injurious influence upon others may be dismissed at any time.

The Younger Boys

Special provision is made for younger boys who plan to enter the Junior, or first-year, class of Phillips Academy in September and who wish to gain experience for the regular Andover program. These pre-Juniors live by themselves under special faculty supervision in Rockwell House, a well-equipped Junior dormitory. Unless ready for more advanced academic work, they study English and arithmetic, in minor courses, to strengthen their foundation in these basic fields, and take at least one activities course.

Faculty and Equipment

The Trustees and Headmaster of Phillips Academy have full authority over the Summer Session. Immediate control is in the hands of the Summer Session faculty and the Director. The faculty of about forty men is drawn almost entirely from the regular Academy teaching staff. All the buildings, equipment, and facilities of the Academy are available for the Summer Session. Classes are held in the regular classroom buildings and students eat in the Commons and live in the brick dormitories. The Oliver Wendell Holmes Library, containing over fifty thousand volumes, the Addison Gallery of American Art, and the museum of the Peabody Foundation for Archaeology are open throughout the summer.

The Daily Schedule

7:15-7:30	Breakfast
8:15-9:08	Class or study hour
9:15-9:40	Assembly
9:45-10:38	Class or study hour
10:45-11:38	Class or study hour
11:45-12:38	Class or study hour
12:45	Lunch
2:00-2:53	Activities course, class, or study hour
3:15-3:45	Body-conditioning
3:45-4:45	Sports
4:45-5:30	Swimming or free time
6:00	Dinner
8:00	Evening study period
9:30	Lights out for Pre-Juniors
10:30	Lights out for the rest of the school

EXPENSES

The charge for a student at the Summer Session is \$300, which covers tuition, room, and board.* Each student is required to make a deposit of \$25 when his application is accepted.† The balance of the charge is due in two installments: \$150 by July 1 and \$125 by August 1.

The charge for day students is \$125, which covers tuition and lunches, but no other meals. Day students are required to make a deposit of \$10 when admitted and to pay the balance by July 1.

Checks should be made payable to the Trustees of Phillips Academy and, upon receipt of bills, sent to the Treasurer of Phillips Academy.

Dormitory rooms are equipped with furniture, bed linen, and blankets. Students must furnish their own desk lamps and, in addition to clothes, towels, and personal effects, such individual athletic equipment as they may wish. Expenses beyond the \$300 charge should be light. They will include small sums for personal laundry, books, incidentals, and spending money. Many of the books needed can be rented from the Academy Loan Library. All students are expected to live simply, and expenditures beyond the Summer Session charges and transportation need not exceed \$25.

SCHOLARSHIPS

Ten full scholarships of \$300 each and a few additional partial scholarships will be awarded to boys of unusual promise not previously enrolled in Phillips Academy whose chief purpose in coming to the Summer Session is to prepare more effectively for eventual national service. Schol-

*See page 19 for the charge for Speech Correction and Remedial Reading courses.

†For a Senior enrolled in the War Program the deposit is \$50, this deposit replacing the one required of students who start the year in September.

arship awards will be based on three factors: intellectual ability, personal qualities, and financial need. Scholarship aid is also available to Andover students on the same terms. Scholarship boys will be expected to take some small job necessary to the smooth functioning of the Session, but such work will in no way interfere with full participation in the life of the school. Scholarship applications should be made on special blanks which will be furnished on request. **These must be returned to the Director by May 15.** Awards will be made by May 25.

Although funds for scholarship aid are limited, it is hoped that no able student of serious purpose will be prevented for financial reasons from enrolling. The Director will be glad to consider any promising applicant who is unable to pay the full fee.

ADMISSION

Because of the purpose and nature of the Summer Session, entrance examinations are not required of regular Summer Session students.* Evidence of serious purpose, good character, and ability to do the work of the courses elected are the only prerequisites. Whenever possible, a personal interview should be arranged. Students from Phillips Academy, high schools, and other secondary schools are eligible. Since the capacity of the Summer Session is definitely limited, early application is highly desirable.

An applicant for admission should fill out completely and carefully the form in the back of this catalogue and forward it to the Director. The Summer Session will then send to the principal of the school which the applicant last attended a request for official records of his work and a certificate attesting his good character.

*Requirements for new Seniors enrolling for the War Program outlined on page 7 are stated in the Phillips Academy catalogue for 1943-44, which may be obtained from the Director of Admissions.

If a student wishes to obtain academic credit at his school for work done in the Summer Session, he should secure the approval of his principal in advance.

Each student must fill out a health questionnaire and secure a physician's certificate. These are combined on a special blank which will be sent to each boy before the opening of the session.

Admission application blanks and full information about the Summer Session may be obtained by writing to the Director, Andover Summer Session, Phillips Academy, Andover, Massachusetts.

SPEECH CORRECTION AND REMEDIAL READING

Special courses are offered in the Summer Session, under the direction of Dr. J. Roswell Gallagher, resident physician of Phillips Academy, for boys of good academic promise who have difficulty in speech or reading. Instruction is given by trained teachers to boys individually. Boys with speech or reading handicaps who plan to enter Phillips Academy in September should give this opportunity serious attention. A personal interview with Dr. Gallagher and the Director before enrollment is very desirable and will be required unless circumstances make it impossible.

Students enrolled in either the speech or remedial reading and spelling courses normally take minor and activities courses and participate in the social and athletic activities of the Session. The nature of the remedial work is such, however, that a major course is usually inadvisable.

Because of the individual and specialized nature of the work, the fee for a student enrolled in these remedial courses is \$400. There is no charge for any other courses which he may take. Dr. Edwin M. Cole of Boston will be available as a special consultant in this field.



The Freeman Room in the Oliver Wendell Holmes Library

The Addison Gallery of American Art



COURSE OFFERING

For information regarding the program of studies of new Andover Seniors enrolling under the War Program, address the Director of Admissions, Phillips Academy.

The following are descriptions of courses open to regular Summer Session students.

N after a course title indicates new work. R indicates review work.

Major Courses

Most major courses meet twice a day, usually the first and last periods of the morning. Outside preparation is required for each meeting.

MATHEMATICS AND SCIENCES

Mathematics 4 N

12 Hours

The regular fourth-year course in elementary mathematics. Prerequisite is the satisfactory completion of three years' work in secondary mathematics: namely, elementary and intermediate algebra and plane geometry. For the Summer Session the course comprises any *two* of the following three parts. *Any one part may be taken as a minor course.*

Mathematics 4 T

6 Hours

A complete study of plane trigonometry and logarithms. Special attention will be given to problem material that is most pertinent to military service.

Mathematics 4 S

6 Hours

A complete study of solid geometry. Spatial relations, constructions, loci, and computations will be emphasized.

Mathematics 4 A

6 Hours

The study of the following topics in advanced algebra: imaginary and complex numbers, the theory of higher degree equations, determinants, permutations, combinations, probability, scales of notation, and mathematical induction.

Mathematics 3 N**12 Hours**

A course in plane geometry for which elementary and intermediate algebra are prerequisites. The course covers five books of plane geometry, many originals, loci, constructions, and numerical exercises.

Mathematics 2 N**12 Hours**

This course, which presumes thorough grounding in at least one year of algebra, comprises elementary and intermediate algebra.

Mathematics 1 N**12 Hours**

The beginning course in algebra. Designed to provide an effective introduction to elementary mathematics, it covers algebra through the solution of simultaneous quadratic equations.

Physics N**12 Hours**

This course consists of two parts, given concurrently, either of which may be taken as a separate minor course. Each part includes laboratory work. Successful completion of both halves of the course will secure credit for a year's work in Physics.

Physics A**6 Hours**

Mechanics and Heat.

Physics B**6 Hours**

Magnetism, Electricity, Light, and Sound.

Chemistry N**12 Hours**

Emphasis is placed upon an understanding of the fundamental concepts of chemistry and upon sound reasoning based on those concepts. Whenever possible, the applications of chemistry to the war and to post-war problems will be stressed. The course includes laboratory work.

Mechanical Drawing

12 Hours

This course provides preliminary training in engineering drafting and prepares either for advanced work in college or for drafting service in defense industries. It covers the use of drawing instruments, lettering, geometric constructions, orthographic and isometric projections, sectioning, and working drawings. For the use of instruments and supplies there will be a service charge of approximately eight dollars.

FOREIGN LANGUAGES

The courses in foreign languages are planned to meet the usual college requirements for each year of study.

Special attention is called here to the opportunity available in the afternoon activities period (see page 29) to supplement courses in modern languages by further practice in speaking them.

The following courses, all of 12 hours, are offered; French 1 N; 2 N; 3 N; German 1 N; 2 N; 3 N; Spanish 1 N; 2 N; 3 N; and Latin 2 N.

ENGLISH AND HISTORY

English 3 N

10 Hours

Training in composition, with emphasis upon exposition and the handling of ideas, and upon the understanding and appreciation of various types of literature. The successful completion of this course secures admission to English 4.

English History

8 Hours

This course traces the development of Parliament and institutions representative of the English people, the significant social and political changes of the seventeenth century, and colonial expansion and rivalry. From the middle of the eighteenth century on, topics include the development of industrial society and its influence upon political movements, the rise of modern imperialism, and aspects of Great Britain's policies in the world today. Successful completion of this course secures admission to History 4.



GEORGE WASHINGTON HALL
Administration Building and Auditorium

Minor Courses — General

Minor courses normally meet six times a week. Outside preparation is required for each meeting.

MATHEMATICS AND SCIENCE

Mathematics 4 T	Trigonometry Logarithms	6 Hours
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Mathematics 4 S	Solid Geometry	6 Hours
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Mathematics 4 A	Advanced Algebra	6 Hours
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See page 21 for an explanation of these courses.

Physics A	Mechanics and Heat	6 Hours
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Physics B	Magnetism, Electricity, Light, Sound	6 Hours
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See page 22 for an explanation of these courses.

Navigation	6 Hours
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This course is open to students who either have had plane trigonometry or are taking the subject during the Summer Session. Emphasis is chiefly upon the underlying theory of navigation, and considerable work is done with the sextant, charts, and plotting sheets. The text used is Dutton's *Navigation and Nautical Astronomy*, United States Naval Institute, 1942.

Mechanical Drawing	6 Hours
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This is an abridged course in engineering drafting. It corresponds in some measure to the course outlined on page 23.

Aeronautics	6 Hours
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This course includes the study of aerodynamics, meteorology, and navigation. As far as time allows, it follows the outline of pre-flight aeronautics as recommended by the Civil Aeronautics Administration. Open only to students who have taken Physics or are studying it at the same time.

HISTORY, SOCIAL STUDIES, ENGLISH, and ART

United States History, 1898 to 1944 **6 Hours**

The history of the United States, both domestic and foreign, from the Spanish-American War to the present time. Open only to Seniors. Qualified students who wish further work in American history may, by special permission, also take the five-hour course in American History open to Andover Seniors enrolled in the War Program. This constitutes a term's work in the regular Phillips Academy American history course and covers the field from the Revolutionary Period to 1850.

International Affairs **6 Hours**

The major national and international political issues of the twentieth century, the causes and development of the present global war, and the problems consequent upon the peace after the war. Open only to qualified boys from the two upper classes.

World Geography **6 Hours**

A survey of the geographical features, economic resources, racial groups, and climatic conditions in the world's strategic areas. Particular attention is devoted to the conflicting interests of the warring powers and to the influence exerted by modern methods of communications. Open only to qualified boys from the two upper classes.

Social Problems **6 Hours**

A study of the basic social problems confronting any organization of society. Particular attention is given to population, religious and social groups, the family and the home, and capital and labor. Important contemporary movements are considered, with emphasis upon problems of post-war reconstruction at home and abroad. Open only to qualified boys from the two upper classes.

English 4 A **6 Hours**

This course gives training in reading and writing at the level of English 4, stressing particularly the analysis and exposition of ideas. The readings are mainly in the essay, the drama, and the novel. The composition work puts emphasis upon the fundamen-

tals of rhetoric, including organization of materials, paragraphing, and sentence structure. Qualified students who need further training in English at this level may, by special permission, also take the four-hour course in English 4 open to Andover Seniors enrolled in the War Program. This constitutes a term's work in the regular Phillips Academy English 4 course.

An Introduction to Art

6 Hours

A general introduction to the art of the past and of our own time. Through lectures, assigned readings, and discussion it considers the general theory of design and the outstanding periods in architecture, painting, and sculpture. In studio work with painting, sculpture, or architecture, students make their own applications of the principles studied. Each boy receives individual instruction in the studio. The full resources of the Addison Gallery, including its fine collection of originals and prints and its special exhibits, are available. Previous experience in art courses is not required.

Minor Courses — Review

MATHEMATICS

Mathematics 3 R

6 Hours

A general review of plane geometry.

Mathematics 2 R

6 Hours

A general review of elementary and intermediate algebra.

Mathematics 1 R

6 Hours

A general review of first-year algebra, designed to anticipate the second-year study in this field.

Arithmetic

6 Hours

This course is basic preparation for the first year in mathematics in Phillips Academy. It covers the fundamental processes with whole, fractional, decimal, and denominate numbers: percentage, simple interest relations and applications; square root; common tables of measures; mensuration of areas and volumes; elementary graphing of statistical material; and mental drill.

FOREIGN LANGUAGES

Minor courses in the languages are all review courses for students who have covered the work previously but either have failed it or feel the need of additional training in order to strengthen their foundation for pursuing more advanced work in the following year.

The following courses, all of 6 hours, are offered: **French 1 R; 2 R; 3 R; German 1 R; 2 R; Spanish 1 R; 2 R; Spanish 1 R; 2 R; and Latin 1 R; 2 R.**

ENGLISH

The English courses are intended for students who wish to make up work in English or to strengthen their foundation in the subject. Each course is designed to prepare students to do successfully the work of the following year in English. Each, at the appropriate level of difficulty, gives training in the basic skills of reading, writing, and speech, and in the understanding and appreciation of various types of literature.

The following review courses, all of 6 hours, are offered: **Pre-Junior English; English 1 R; 2 R; 3 R.**

Activities Courses

Activities courses meet in the early afternoon for a varying number of hours a week. The classroom work, under competent instruction, is similar to that of the regular academic courses, but requires little or no outside preparation. A boy who carries only twelve hours of regular academic work and who is not devoting his afternoons to the work program is expected to take a total of five hours of activities courses.

First Aid

2 Hours

The standard elementary Red Cross course given by faculty members who are qualified instructors.

Communications

5 Hours

This course gives practice in receiving and sending International Morse Code. By the end of the summer, the better students should be able to handle the Amateur License minimum of thirteen words a minute. For many boys this course has great value as preparation for military service.

Coastal Piloting

3 Hours

This course gives instruction in the reading and use of charts, the plotting of courses, and the finding of positions by various methods. It gives special training in the use of parallel rulers, dividers, the sextant, and tracing paper. For this course some knowledge of plane geometry is helpful, though not an absolute prerequisite.

Typewriting

2 to 5 Hours

This course gives instruction and practice in the touch system. Students who enroll must provide their own typewriters.

Spoken Language

2 to 5 Hours

Direct-method classes in French, Spanish, and German are held in the activities hour for boys who wish to supplement their work in the standard language courses or for any others who want to gain facility in the spoken language. One class in each language is planned for beginners or for those who have completed not more than a year's study of grammar. Another is designed for students who have reached a more advanced stage.

The Arts and Crafts

2 to 5 Hours

In the activities hour, group or individual work may be carried on in any one or more of the following. All will be under faculty supervision.

Dramatics: The acting and staging of one-act plays.

Music: Practice on the piano or other musical instruments. Piano lessons are available at moderate extra expense. Ensemble music will be organized if enough boys are interested.

Studio Art: Sketching, painting, or modeling outdoors or in the studio of the Addison Gallery of American Art.

Reading: Planned reading of a student's own choice but under the guidance of a teacher in the Oliver Wendell Holmes Library.

Printing: A print shop and press are available for students who wish to learn to set type and do printing either for themselves or for other Summer Session activities.

Model Railroad: This activity is an extension of the work of the Phillips Academy Model Railroad Club. Interested students build scale equipment, including rolling stock, scenery, and track layouts.

The Summer Session Faculty

Claude Moore Fuess, Ph.D., Litt.D., L.H.D.	<i>Headmaster</i>
James Gould, A.B.	<i>Treasurer</i>
Henry Hopper	<i>Associate Treasurer and Comptroller</i>
Alan Rogers Blackmer, A.M.	<i>Director</i>
Oswald Tower, A.B.	<i>Senior Class Officer</i>
Alfred Graham Baldwin, A.B., B.D.	<i>School Minister</i>
John Sedgwick Barss, A.M.	<i>Physics</i>
Frank May Benton, A.B.	<i>Latin</i>
Frederick May Boyce, A.M.	<i>Physics</i>
Chester Archibald Cochran, A.M.	<i>French</i>
Allan Thompson Cook, A.B.	<i>English</i>
Roscoe Edwin Dake, S.B.	<i>Chemistry</i>
Frank Frederic Di Clemente, S.B.	<i>Athletics</i>
Douglas Mansor Dunbar, A.B.	<i>Mathematics</i>
John Loxley Firth, Ph.D.	<i>Spanish</i>
Dudley Fitts, A.B.	<i>English and Spanish</i>
George Little Follansbee	<i>Administration</i>
James Roswell Gallagher, M.D.	<i>School Physician</i>
Walter Gierasch, A.B.	<i>English</i>
James Hooper Grew, Docteur ès Lettres de l'Université de Paris	<i>French</i>
Floyd Thurston Humphries, A.B.	<i>French</i>
Leonard Frank James, A.M.	<i>History</i>
Thomas John Johnson, B.S.	<i>Physical Education</i>
John Payson Lane, S.B.	<i>Chemistry</i>
Miles Sturdivant Malone, Ph.D.	<i>History</i>
Robert Edward Maynard, S.B.	<i>Mathematics</i>
Francis Bertrand McCarthy, A.B.	<i>English</i>

Patrick Morgan, A.B.	<i>Art</i>
Evan Albert Nason, A.B.	<i>Mathematics</i>
Lester Charles Newton, A.M.	<i>French</i>
Richard Sawyer Pieters, A.M.	<i>Mathematics</i>
Philip Potter, A.M.	<i>History</i>
George Knight Sanborn, A.B.	<i>Work Program</i>
Edmund John Schubert, S.B.	<i>Physical Education</i>
Otis Chase Severance, S.B.	<i>Mechanical Drawing</i>
Robert Whittemore Sides, A.B.	<i>Navigation</i>
Winfield Michael Sides, S.B.	<i>Mathematics</i>
Dirk Hugo van der Stucken	<i>German</i>
Robert Bates Taylor, A.M.	<i>French</i>
Norman Étienne Vuilleumier, A.B.	<i>English</i>
Frederick Ellsworth Watt, S.B.	<i>Mathematics</i>
Reginald Isaac Wilfred Westgate, Ph.D.	<i>Latin</i>

